

Innovation in Action

IDS1359



IDS 1359 INNOVATION-IN-ACTION – Summer A 2025, 2 credits

Section/Class	Location	Day & Time
019C/12787	CSE E312	M/W Periods 2-3 9:30am – 12:15pm
0184/12783	Hume	M/W Periods 5-6 2:00 – 4:45pm
019A/12786	CSE E312	T/R Periods 4-5 12:30pm – 3:15pm

INSTRUCTOR: Diane “DP” Porter-Roberts, PhD

E-MAIL: dianep@ufl.edu

OFFICE HOURS: By Appointment

E-LEARNING/ CANVAS WEBSITE: <http://elearning.ufl.edu>

REQUIRED TEXT

Knapp, J., Zeratsky, J. & Kowitz, B. (2016). *Sprint: How to solve big problems and test new ideas in just five days*. New York, NY: Simon & Schuster.

REQUIRED MATERIALS

For participation in this course, you need access to the following materials throughout the class:

- IA issued Idea Book/Sketchbook for brainstorming, diagramming, idea generation; continue in your same book from IDS 1940
- Fusion 360 (Autodesk account with Gatorlink e-mail), Microsoft PowerPoint & Word, Google Jamboard
- (Optional) Adobe Illustrator, Arduino kit from IDS 1940
- Two 3” X 3” post-it notepads
- 1 dry-erase whiteboard marker
- Tablet or laptop computer with camera, microphone, and internet access
- No more than \$50 per person budgeted for final prototype and poster
- Positive attitude and curious mind!

NOTE: Students may be using small power hand tools, exacto knives, hot glue guns, soldering irons, etc. Students are required to participate in in-class demonstrations and/or video tutorials to learn appropriate use of tools. Tools should be handled with respect and care and utilized for intended purposes only.

COURSE DESCRIPTION

This course focuses on the development of creative problem-solving strategies through completion of an innovative project. Students will refine the design thinking skills developed in IDS 1940, prototype a concept, test and refine the prototype, and complete and present the final project at Catalyst.

Prerequisite: Passing grade in IDS1940: Creativity & Design Thinking for Innovation

PURPOSE OF COURSE

Students will become fully immersed in the human-centered design thinking process. Students will be tasked with finding innovative solutions to real-world problems through building an original concept, testing and iterating the idea, and presenting a complete prototype that will be exhibited and presented in an all-class, public, IA exhibition, known as the Catalyst Showcase. Final prototypes will demonstrate knowledge and skills from IDS 1940, including design thinking, effective interdisciplinary teamwork, and 3D modeling.

COURSE GOALS & OBJECTIVES

By the end of this course students will:

- 1) Experience the human-centered design thinking process by:
 - a) Defining the path to innovation: Discover, Perceive, Ideate, Make, Connect, Launch,
 - b) Being able to find problems primed for innovative solutions,
 - c) Collecting research through human-centered methods of inquiry,
 - d) Evaluating research findings and synthesizing learning to find multiple unique solutions to the design problem,
 - e) Demonstrating application of creative thinking tools to generate original ideas during the design process, and
 - f) Effectively use the process of design thinking to iterate ideas, pivot ideas, and create a refined prototype that solves a design challenge.
- 2) Engage in interdisciplinary collaborations & consensus building to acquire an awareness of:
 - a) Teamwork structures and dynamics,
 - b) The nature and value of integrated design practices, and
 - c) Methods of conflict resolution.
- 3) Define innovation as a solution that is: novel, desirable, feasible, viable, and ethical.
- 4) Effectively and professionally present an innovative concept and prototype in a public showcase.

PARTICIPATION/ATTENDANCE

Please be advised that IDS1359 requires attendance. This is a short semester, and a lot will be covered in each class. It is the student's responsibility to be present and appropriately engaged in class and to actively engage with peers on the team project outside of class. This course is highly experiential and requires active dialogue, small group work, and hands-on-exercises to facilitate the learning process and to get the most out of the IA design thinking experience. Students are expected to complete all class assignments, readings, and participate in small group meetings as determined by the team.

Participation is defined as coming to class having completed all module work; being prepared to discuss required readings/videos; initiating meaningful contributions to class discussions; fully completing all individual and group class activities; participating actively in group work; and demonstrating the ability to apply class learning to assigned projects. Consequently, a significant percentage of the final grade will result from participation.

Students are expected to log on to the Canvas course page weekly and review the week's course material. Students are responsible for checking email and e-Learning for course communications *at least once every 24 hours*. Instructors will not be held accountable for students who are unresponsive to electronic communications about coursework that could impact students' grades. If students are not receiving regular emails from e-Learning or faculty, they should check their "junk" inbox in the UF email system to make sure course emails are not being incorrectly marked.

Excused absences are religious holidays, documented illnesses and/or documented emergencies approved by the course instructor. Missed work for any absence must be made up within a timely fashion. If a student misses a class, they should email their instructor as soon as possible, consult the Canvas page for class material, and obtain any necessary information regarding class or assignments from another class member in their section or a member of their team.

Requirements for class attendance, make-up work, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>

Note: This course only runs for five weeks during the six-week semester. There is no class following the Catalyst Showcase at the end of week 5, although there may still be some assignments due in week 6.

PROTOTYPE INVESTMENT

For the final Catalyst team prototype and presentation, students should invest ***no more than \$50 maximum per person*** in their team. This cost will cover the team poster and prototype, and any other materials for the team's display. Using less than this amount is encouraged as long as students design a quality product and poster presentation. Prototypes are required to include a combination of methods from IDS 1940: rapid sustainable prototyping, Adobe Illustrator/Laser cutting, Fusion 360/3D printing, and/or Arduino. There is a list of local inexpensive/free resources in Canvas.

INNOVATION ACADEMY SPEAKER SERIES (Required out-of-class participation)

To further enrich course learning, students will have the opportunity to learn from industry experts who will be invited to share their stories and experiences relevant to the course learning. There will be one speaker event/webinar during each summer semester. **Attendance at the IA Speaker Series event is required.** Student participation will follow the same attendance and participation policies noted in the syllabus. More information will be shared in class prior to the event.

CATALYST

Summer A: Friday June 13, 2025, 2:00-5:00pm, Florida Gymnasium (located behind Infirmary)

(Students should arrive at the event by 1:30pm)

The course will culminate in an Innovation Academy sponsored event called the Catalyst Showcase where class teams will present prototype solutions to the Catalyst Innovation Challenge. This is a juried event with selected award winners. **Attendance at this event is required unless the absence is due to an extenuating conflict approved by course instructor at least 2 weeks prior to the event.** If a student has a scheduled class during Catalyst, they can request an excuse letter from their instructor to try to be excused from their other class so that they can attend Catalyst. It is up to the other instructor's discretion whether the request will be granted. If it is not granted, the student will be excused from Catalyst but needs to make sure they have worked to support their team's presentation in other ways. Participation in Catalyst is critical. There is the possibility that an unexcused absence at this event will significantly impact the final course grade.

At the Catalyst Showcase event, all teams will have a 6 ft. table to display their projects. At *minimum*, teams are required to have a refined, complete, working prototype and a professional-looking, well-designed digitally printed poster. The poster should measure 24" x 36" and be dry-mounted, spray glued or evenly taped on to a flat piece of foam core. Student teams need to bring a stand or something to prop up the poster on the table. Students may bring other created or display items for their table that enhance their prototype demonstration and pitch, however, the total amount spent on all the items cannot exceed \$50.00 per person on the team. All team members should be prepared with a one-minute form, function, and benefit pitch for their innovation.

COURSE EVALUATION

The course requires the completion of one group project (team of 4-5 students) accounted for in the Process and Final Project sections. The required course components are weighted as follows:

PARTICIPATION (40% of final grade)

(Includes attendance, active class participation, and self/peer evaluations)

Attendance	200 pts
Self/Peer Evaluations	200 pts
Speaker Series Assignment	100 pts
4 Content Accountability* (@ 100 ea)	400 pts
<i>*Related to Readings</i>	
2 Applied Homework (@ 100 ea)	200 pts
Team Engagement/Participation	200 pts

PROCESS (30% of final grade)

Checkpoint 1 & 1a	75/25 pts
Checkpoint 2	100 pts
Checkpoint 3	100 pts

Design Thinking Process Documentation	100 pts
FINAL CATALYST PROJECT (30% of final grade)	
Final Prototype	500 pts
Final Pitch & Poster	500 pts
Participation in Catalyst	250 pts
TOTAL COURSE POINTS	2950 pts

A	100%	to	94%
A-	< 94%	to	90%
B+	< 90%	to	87%
B	< 87%	to	84%
B-	< 84%	to	80%
C+	< 80%	to	77%
C	< 77%	to	74%
C-	< 74%	to	70%
D+	< 70%	to	67%
D	< 67%	to	64%
D-	< 64%	to	61%
E	< 61%	to	0%

Grading Scale*

*Note that a C- is not an acceptable grade for any course in which a 2.0 GPA is required. In IA, all courses must be completed with an overall 2.0 GPA in the minor and a cumulative 2.0 UF GPA. For additional information on UF grade policies see:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

READ THE DIRECTIONS for all assignments, including method of submission (i.e., Canvas, in class, individual, team), naming of document, date and time due, format/file extension (i.e., pdf, docx, jpg/jpeg, mp4, stl, ppt). Only formats compatible with Canvas will be accepted in Canvas (i.e., **no HEIC, Keynote, Pages files**). **Files that are submitted incorrectly will not be graded.**

COMPLETE/INCOMPLETE GRADES: If an assignment is graded based on a Complete/Incomplete grading scheme, then submissions that fulfill all tutorial skills development exercises, documentation and submission guidelines will receive a Complete and full credit for the assignment. Submissions that do not successfully fulfill all tutorial skills development exercises, documentation and submission guidelines will receive an Incomplete and no points. Incomplete assignments may be resubmitted for regrading until the assignment closes.

*Canvas does not support Apple's HEIC photo format. **If using an iPhone to document your work, you must convert the images to jpeg format before uploading.**

UF POLICIES:

ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center. See the ["Get Started With the DRC" webpage](#) on the Disability Resource Center site. It is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.

ACADEMIC HONOR CODE

Every University Student is subject to the following Honor Pledge: *We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."*

The Honor Code (<https://policy.ufl.edu/regulation/4-040/>) specifies several behaviors that are in violation of this code and the possible sanctions. Review the most up-to-date version of the [Orange Book](#) for more information on violations of the Student Honor Code. If you have any questions or concerns, please consult with the course instructor.

You are expected to do your own work. Cheating and plagiarism are not tolerated in this course. Instances of unacceptable academic behavior will be referred to the Office of Student Conduct & Conflict Resolution.

***NOTE:** As an innovative addition to the classroom experience, students will be using various AI tools (i.e., ChatGPT - a language model developed by OpenAI) to enhance learning and foster creative thinking. By incorporating these tools into class activities and discussions, students are encouraged to engage with course materials in new ways and explore a wide range of ideas. AI tools are to be used only as a resource and not as a generator of student work. Students are expected to cite sources as necessary and submit original work. **(ChatGPT was consulted to aid in writing this paragraph.)* The use of generative AI tools (e.g., ChatGPT, Dall-e, etc.) is permitted for: brainstorming and refining your ideas; fine tuning your research questions; finding information on your topic; drafting an outline to organize your thoughts; generating graphics; or checking grammar and style. The use of AI is not permitted for: impersonating you on discussion boards; writing sentences, paragraphs, papers, or presentations to complete assignments. If you have questions as to whether AI is permitted for other reasons, please consult with your course instructor.

INTELLECTUAL PROPERTY

The student team holds the rights to intellectual property created and designed as a part of the course unless the student is paid by the University of Florida. The Office of Technology Licensing <http://www.research.ufl.edu/otl/> is available to assist students for copyrighting and licensing of an original idea. They can also assist in releasing rights to the appropriate owner if, and when, it is applicable.

TECHNICAL SUPPORT

If you have any technical issues, including issues with Canvas in e-learning please immediately contact the UF Help Desk at helpdesk@ufl.edu; 352-392-HELP (4357) and select option 2; or the UF Help Desk website at: <http://helpdesk.ufl.edu/>

****** Any requests for make-ups due to technical issues **MUST** be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time

and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

COURSE EVALUATIONS

“Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluer.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.”

UF CAMPUS RESOURCES:

HEALTH AND WELLNESS

- **U Matter, We Care:** *If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) to refer or report a concern and a team member will reach out to the student in distress.*
- **Counseling and Wellness Center:** *[Visit the Counseling and Wellness Center website](#) or call 352-392-1575 for information on crisis services as well as non-crisis services.*
- **Student Health Care Center:** *Call 352-392-1161 for 24/7 information to help you find the care you need or visit the [Student Health Care Center website](#).*
- **University Police Department:** *Visit [UF Police Department website](#) or call 352-392-1111 (or 9-1-1 for emergencies).*
- **UF Health Shands Emergency Room/Trauma Center:** *For immediate medical care call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608. Visit the [UF Health Emergency Room and Trauma Center website](#).*
- **GatorWell Health Promotion Services:** *For prevention service focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273-4450.*

ACADEMIC RESOURCES

- *e-Learning/Canvas technical support, 352-392-4357 (select option 2) or e-mail to Learningsupport@ufl.edu <http://helpdesk.ufl.edu/>*
- *Career Connection Center/Clothes Closet, Reitz Union, 392-1601. Career assistance, counseling, & clothing. <https://career.ufl.edu/>*
- *Library Support, <http://cms.uflib.ufl.edu/ask> Various ways to receive assistance with respect to using the libraries or finding resources.*
- *Academic Support Resources, [Turlington Hall](#). General study skills and tutoring. <https://academicresources.clas.ufl.edu/>.*

COURSE OUTLINE¹

Week	Topics	Reading for the Week	Due – check Canvas for date/time
1A DISCOVER	SET THE STAGE Course Introduction Review Syllabus Review Design Thinking Introduce the Sprint Design Challenge Discuss Class Format Build a Team	<i>Sprint</i> – Introduction & Ch. 1-5; pp.1-67 (discussion on week 2A)	-Skills & Interests Survey
1B DISCOVER	MAPPING – TEAM DESIGN THINKING PROCESS Team Roles & Goals Map the Challenge Set up Jamboard		
2A PERCEIVE	SET A TARGET Brainstorming Journey Mapping Empathizing with the User Human-Centered Interviews Research	<i>Sprint</i> –Ch. 6-9; pp. 68-123 (discussion on week 3A)	-Content Accountability 1 – Sprint Chapters 1-5 discussion -Design Sprint Team Role Assignments
2B PERCEIVE	ASK THE EXPERTS – TEAM DESIGN THINKING PROCESS Immersive Learning Share What Is Learned Begin to Brainstorm		-Checkpoint 1 -Applied Homework 1
3A IDEATE	REMIX AND IMPROVE Decision Making Concept Development Build a Storyboard Design & Branding	<i>Sprint</i> – Ch. 10-14; pp. 127-190 (discussion on week 4A) <i>Note: Even if you do not have class because of Memorial Day, you are still responsible for the reading.</i>	-Content Accountability 2 – Sprint Chapters 6-9 discussion -Checkpoint 1a
3B IDEATE	SKETCH & DECIDE – TEAM DESIGN THINKING PROCESS Concept Development Build a Storyboard Design & Branding		-Applied Homework 2 (due <u>after</u> class)

4A MAKE	PROTOTYPE Prototyping/Fusion Team Evaluate the Solution Refine Concepts Discuss Pitch and Presentation Catalyst Readiness	<i>Sprint</i> – Ch. 15-17 & Liftoff; pp. 195-231 (discussion on week 5A)	-Content Accountability 3 – Sprint Chapters 10-14 discussion -Checkpoint 2 -Applied Homework 2 <i>Catalyst Registration due June 4</i>
4B MAKE	PROTOTYPE – TEAM DESIGN THINKING PROCESS Evaluate the Solution Refine Concepts Pitching General Business Models		
5A CONNECT	TEST & ITERATE Quick User Testing Integrating Feedback Iteration <i>Mock Catalyst in Class with IA Ambassadors</i>		-Content Accountability 4 – Sprint Chapters 15-17 -Checkpoint 3a, 3b, 3c -Poster check-in this week! <i>Mock Catalyst this week</i>
5B CONNECT	PRESENTATION & PERSUASION Professionalism Being Prepared Making a Concept Real Planning for What's Next		DUE IN-CLASS Final Prototype & Presentation
5B² CATALYST	CATALYST <i>Summer A: June 13, 2025 – Florida Gym</i> All students arrive at 1:30pm Event from 2:00pm-5:00pm		Attend Catalyst
WEEK 6 – WRAP UP	No class this week		-Final Peer Evaluations -Design Thinking Documentation -Final Course Evaluations

¹Course schedule subject to change at instructor's discretion

²**NO CLASS, BUT MUST ATTEND CATALYST**

Required Speaker Series TBA

